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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,342	02/17/2004	Christopher J. Misorski	M09719	9955

7590 04/01/2005

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EXAMINER

OLSON, LARS A

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,342

Applicant(s)

MISORSKI ET AL.

Examiner

Lars A Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 18 and 23 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. An amendment was received from the applicant on January 25, 2005.
2. Claims 16, 17, 19-22 and 24-32 have been canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al. (US 6,312,821).

Takasaki et al. discloses a marine propulsion device, as shown in Figures 1 and 2, that is comprised of an outboard motor, defined as Part #10, with an aluminum gear housing structure, defined as Part #11, an aluminum drive shaft housing, defined as Part #12, that is attached to said gear housing, and a polymer layer, defined as Part #24, that is chemically bonded on an outer surface of said gear housing structure and said drive shaft housing, as shown in Figure 2, with an adhesion promoting substance, defined as Part #23, facilitating adhesion of said polymer layer to said outer surface of said gear housing structure and said drive shaft housing.

Takasaki et al., as set forth above, discloses all of the features claimed except for the use of a gear housing structure with a thermal coefficient of expansion that is generally similar to a thermal coefficient of expansion of a polymer layer.

The use of a polymer layer with a thermal coefficient of expansion that is generally similar to a thermal coefficient of expansion of a metallic part that is to be coated by said polymer layer would be considered by one of ordinary skill in the art to be a design choice for the purpose of matching said thermal coefficients of expansion in order to minimize cracking of or damage to said polymer layer resulting from thermal expansion of said metallic part.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a polymer layer with a thermal coefficient of expansion that is generally similar to a thermal coefficient of expansion of a metallic part that is to be coated by said polymer layer, in combination with the marine propulsion device as disclosed by Takasaki et al. for the purpose of providing a marine propulsion device with a polymer layer over a metal gear housing structure that will expand and contract at generally the same rate as said gear housing structure in order to avoid cracking or thermal damage.

5. Claims 1, 2, 6, 7, 9-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al. in view of deBlois et al. (US 5,718,014).

Takasaki et al., as set forth above, discloses all of the features claimed except for the use of a polymer layer that is molded around a metallic gear housing structure.

DeBlois et al. discloses a motorized device with an overmolded cover, as shown in Figures 1-13, said device being comprised of a metal gear housing structure, defined as Part #22 in Figure 2, and a polymer layer, defined as Part #24, that is overmolded on said gear housing structure, as shown in Figure 1, by means of injection molding, as shown in Figure 9A, in order to make said gear housing structure waterproof.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a polymer layer that is overmolded on a metal gear housing structure, as taught by deBlois et al., in combination with the marine propulsion device as disclosed by Takasaki et al. for the purpose of providing a marine propulsion device with a gear housing structure having a waterproof outer covering.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al. in view of deBlois et al., and further in view of Rafferty et al. (US 5,656,376).

Takasaki et al. in combination with the teachings of deBlois et al. shows all of the features claimed except for the use of a polymer layer comprised of a fiber, glass or carbon filled polymer.

Rafferty et al. discloses a laminate structure for use with marine propulsion devices, as shown in Figures 1-35, said laminate structure being comprised of a polymer in the form of an epoxy resin with reinforcement material in the form of fibers, glass or carbon added to increase the strength of said polymer, as described in lines 40-56 of column 8.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a polymer layer comprised of a fiber, glass or carbon filled polymer, as taught by Rafferty et al., in combination with the marine propulsion device as disclosed by Takasaki et al. and the teachings of deBlois et al. for the purpose of providing a marine propulsion device with a stronger polymer coating that protects said device from corrosion and other damage.

Allowable Subject Matter

7. Claims 8, 18, and 23 are allowed.

Response to Arguments

8. Applicant's arguments with respect to claims 1-7 and 9-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

March 25, 2005

LARS A. OLSON
PRIMARY EXAMINER

Lars Olson

3/25/05